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## Northwest Power and Conservation Council

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April 18, 2014

### DECISION MEMORANDUM

**TO:** Council Members

**FROM:** Charlie Black, Power Planning Division Director

**SUBJECT:** Recommendation to select Navigant Consulting to Redevelop the Council's Regional Portfolio Model

### PROPOSED ACTIONS

1. Council vote on the staff evaluation team's recommendation to select Navigant Consulting's proposal as the best response to the December 19, 2013, Request for Proposals for Regional Portfolio Model Redevelopment
2. Council vote to authorize staff to negotiate and execute a contract with Navigant subject to negotiation of terms and conditions described by staff

### SIGNIFICANCE

The Regional Portfolio Model (RPM) is a primary analytical tool the Council uses to support preparation of its regional power plans. The Council has recognized a need to redevelop RPM, and to complete the redevelopment in time for use of RPM for the Seventh Northwest Power Plan.

### BUDGETARY/ECONOMIC IMPACTS

The Navigant proposal is for a firm fixed fee of \$300,000, all inclusive, for the complete model redevelopment effort. Payments are expected to occur during fiscal years 2014 and 2015. The total amount is within the budgeted funds for the Power Planning Division contracting and modeling activities for both years.

### BACKGROUND

Recognition of systemic risk and uncertainty are central to the Council's regional power planning. The existing RPM was developed by Council staff and used for the Fifth and Sixth Northwest Power Plans. RPM provides strategic risk analysis capabilities that

have not yet been implemented in commercial integrated resource planning models. The RPM methodology was reviewed and validated by an independent review panel in late 2012 (see [www.nwcouncil.org/media/10366/RPMPortfolioModelReview.pdf](http://www.nwcouncil.org/media/10366/RPMPortfolioModelReview.pdf)).

However, for various reasons, the existing RPM is difficult to use and depends on multiple software tools, including several that are no longer vendor-supported (see [www.nwcouncil.org/media/6911100/RPM-Implementation-Review-131218.pdf](http://www.nwcouncil.org/media/6911100/RPM-Implementation-Review-131218.pdf)). Further, the lead developer and user of RPM retired from the Council in 2013. These factors made it apparent that while the RPM methodology has great strengths, the existing implementation needs to be replaced.

After consultation with regional stakeholders, and with guidance from the Council members, a competitive process was undertaken to select an outside vendor to redevelop the RPM software. A request for proposals was developed and issued on December 19, 2013 (see [www.nwcouncil.org/media/6911137/RPM-RFP-131219.pdf](http://www.nwcouncil.org/media/6911137/RPM-RFP-131219.pdf)). The RFP was designed to allow respondents flexibility in crafting their proposals. For example, respondents could propose to create an entirely new model that implements the RPM methodology, or they could propose to modify an existing resource planning model by incorporating the RPM methodology into it.

## **ANALYSIS**

Council staff conducted a highly structured, open, and competitive process to solicit and evaluate proposals for redevelopment of the RPM software. Council staff briefed and received guidance from the Power Committee and full Council at several points throughout the process.

Six proposals were received in response to the RFP. An internal staff team evaluated the proposals using a set of criteria that were clearly identified in the RFP. This led to short-listing of three vendors' proposals for further consideration: Ascend Analytics, Energy Exemplar, and Navigant Consulting.

Ascend Analytics proposes making incremental modifications to add systemic risk analysis capabilities to its existing PowerSimm model. Similarly, Energy Exemplar proposes to complete work it has already begun to add risk-constrained stochastic analysis capabilities to its existing Plexos model. In contrast, Navigant consulting proposes to build an entirely new integrated resource planning model that implements the RPM methodology.

Both Ascend Analytics and Energy Exemplar propose annual subscription-based approaches for ongoing Council access to their software, including subsequent upgrades. Navigant Consulting proposes a firm, fixed fee of \$300,000 for development of a new model that the Council would then have ongoing rights to use at no further cost. However, the Council would bear any costs of future upgrades to the model.

After the three short-listed proposals were selected, staff conducted further evaluation. This included issuing and reviewing responses to two rounds of clarification questions and conducting 2-1/2 hour in-person meetings with each vendor. The vendors also gave

presentations to a group of seven regional stakeholder representatives, and Council staff obtained comments from the stakeholder group.

On April 16, 2014, the Council staff evaluation team met to review their respective evaluations of the three short-listed proposals. Each team member independently scored the proposals, again using the evaluation criteria identified in the RFP. The results of the individual team members' scores were then compared. These results showed that all members of the staff evaluation team selected the Navigant Consulting proposal as best-suited to meeting the Council's needs. Accordingly, the team unanimously recommends that the Council vote to select Navigant Consulting proposal.

It should be noted this decision involves balancing a significant tradeoff. On one hand, the Navigant Consulting proposal offers a more complete implementation of the RPM strategic risk analysis methodology. However, because it involves development of an entirely new model, there are potentially greater risks of delay or other difficulties during the software development process.

The staff evaluation team carefully evaluated the Navigant Consulting proposal with these risks in mind, and found that the proposal sets forth an effective process for managing the risks. This includes iterative software development in three phases or cycles, each of which will require the vendor to demonstrate clear progress and performance to deliver on-schedule. Navigant has committed to deliver a first prototype model in August 2014, an updated version with priority enhancements in November 2014, and the completed model in February 2015.

## **ALTERNATIVES**

One alternative would be to attempt to continue to use the existing RPM software that was originally developed nearly a decade ago. However, due to the operational complexities and software obsolescence issues described above, this would expose the Council to significant risks of delays and difficulties in preparation of the Seventh Plan. Further, this approach would continue to impede dissemination of the RPM methodology.

Another alternative would be to select one of the other short-listed proposals, both of which involve adding the RPM risk analysis methodology to the vendor's existing integrated resource planning software. This approach could reduce the risk of having a model ready by February 2015. However, it would require selecting a proposal that did not perform as well as the top-ranked proposal from Navigant Consulting. For example, incrementally modifying an existing model could produce a less complete implementation of the Council's strategic risk analysis methodology.

## **ATTACHMENTS**

Regional Portfolio Model Software Redevelopment Vendor Selection Timeline.

**Northwest Power and Conservation Council**  
**Regional Portfolio Model Software Redevelopment**  
**Vendor Selection Timeline**

<b>Date</b>	<b>Action</b>
October 8, 2013	Proposed RPM RFP Approach Discussed at Power Committee Meeting
November 14, 2013	Staff Discussed RPM RFP Approach with System Analysis Advisory Committee
December 10, 2013	Staff Presented Outline of RFP at Power Committee Meeting
December 19, 2013	Council Issued RFP
January 8, 2014	Pre-Bid Teleconference
February 6, 2014	Six Vendors Submit Proposals
February 25, 2014	Council Short-Listed Three Proposals
March 6, 2014	Staff Sent Clarification Questions to Short-Listed Vendors
March 11, 2014	Progress Report on RFP Process Discussed at Power Committee Meeting
March 18-19, 2014	Staff Met with Short-Listed Vendors (2.5 Hours Each)
March 19, 2014	Short-Listed Vendors Met with Group of Seven Stakeholders (1.5 Hours Each)
March 20, 2014	Staff Solicited and Reviewed Written Feedback from the Group of Seven Stakeholders
April 4, 2014	Staff Sent Follow-Up Questions to Short-Listed Vendors
April 8, 2014	Staff Progress Report on RFP Process at Power Committee and Council Meetings
April 10, 2014 - April 16, 2014	Staff Conducted Reference Checks of Short-Listed Vendors
April 18, 2014	Council Webinar Meeting to Decide on Staff Recommendation to Select Navigant Consulting to Redevelop RPM